

REMARKS

The claims have been amended as needed so as to take care of the formal matter noted by the Examiner.

Claim 1 has also been amended so as to incorporate a portion of the claim 3 subject matter, namely, the fact that the oscillation of the resonator is thickness shear mode oscillation, as seen at 51 in Fig. 5A of our drawings.

No reference of record nor any proper combination thereof discloses this feature of the present invention. Specifically, thickness shear mode oscillation is not disclosed in any way by FERRARI et al., only longitudinal vibrations.

Thickness shear mode oscillation has a substantial advantage over longitudinal vibration: a resonator with thickness shear mode oscillation can be used for fluids in the form of liquids. Within a liquid, the attenuation of the thickness shear mode oscillation is much smaller than for longitudinal oscillation. Therefore, the quality and sensitivity of the resulting device for determining a substance is much higher in the case of a device using thickness shear mode oscillation than in the case of a device using longitudinal oscillation.

As claim 1 clearly brings out this distinction with ample particularity, it is believed that claim 1 is patentable, and with it the claims that depend therefrom.

In view of the present amendment, and the foregoing remarks, therefore, it is believed that this application has been placed in condition for allowance, and reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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